

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
10/079,027	02/19/2002	Gennady Ruderman	V0077/7223	6406
7:	590 . 07/16/2003			
Gary L. Loser, Esq. Vice President and General Cousel Varian Semiconductor Equipment Associates, Inc. 35 Dory Road Gloucester, MA 01930			EXAMINER	
			PEAVEY, ENOCH E	
			ART UNIT	PAPER NUMBER
Giodostoi, Mi	1 01750		3676	-
			DATE MAILED: 07/16/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

		$\hookrightarrow$				
	Application No.	Applicant(s)				
	10/079,027	RUDERMAN, GENNADY				
Office Action Summary	Examiner	Art Unit				
	Enoch E Peavey	3676				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be within the statutory minimum of thirty (30) dwill apply and will expire SIX (6) MONTHS from the application to become ABANDON	timely filed lays will be considered timely. om the mailing date of this communication. NED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 19 F	ebruary 2002 .					
2a) This action is <b>FINAL</b> . 2b) ☑ Thi	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	Ex parte Quayre, 1999 O.D. 11	, 400 0.0. 210.				
4) Claim(s) 1-35 is/are pending in the application.						
4a) Of the above claim(s) 35 is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-34</u> is/are rejected.						
7) Claim(s) is/are objected to.	☐ Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examiner						
10) The drawing(s) filed on is/are: a) accept	•					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the prior application from the International But</li> <li>* See the attached detailed Office action for a list</li> </ul>	reau (PCT Rule 17.2(a)).					
14) Acknowledgment is made of a claim for domestic	c priority under 35 U.S.C. § 119	e(e) (to a provisional application).				
<ul> <li>a) ☐ The translation of the foreign language pro</li> <li>15)☐ Acknowledgment is made of a claim for domesting</li> </ul>	• •					
Attachment(s)						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4</li> </ol>	5) Notice of Informa	ary (PTO-413) Paper No(s) al Patent Application (PTO-152)				
S. Patent and Trademark Office						

Application/Control Number: 10/079,027 Page 2

Art Unit: 3676

## **DETAILED ACTION**

## Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1-34, drawn to a sealing device, classified in class 277, subclass
     503.
  - Claim 35, drawn to ion beam measuring device, classified in class 250, subclass 397.
- 2. Inventions II and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because it is not necessary that the sealing member be flexible to seal between the differing pressure regions, a seal could be accomplished with an o-ring, lip-seal or face seal. The subcombination has separate utility such as a dust seal in a steering column; it is not necessary that the seal be incorporated in an ion beam-measuring device.
- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Application/Control Number: 10/079,027

Art Unit: 3676

4. During a telephone conversation with William McClellan, Reg. No. 29,409 on June 111, 2002 a provisional election was made with traverse to prosecute the invention of group I, claim1-34. Affirmation of this election must be made by applicant in replying to this Office action. Claim 35 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claim rejected under 35 U.S.C. 102(b) as being anticipated by Hubler, US No. 3,666,276. Hubler discloses a sealing device comprising a shaft seal (5a) having a sealing portion and a support portion (FIG. 2). The sealing portion is constructed and arranged to sealingly engage with a shaft and allow the shaft to be at least one of slidingly and rotationally moved relative to the sealing portion (FIG. 2). There is a seal mount (22) having a first end (12), a second end (13) and a flexible member (6a) between the first (12) and second ends (13) that enable movement of the first end relative to the second end in at least one degree of freedom (via flexible connecting bellows portion). The first end (12) is sealingly engageable to at least a portion of the support portion (3a) of the shaft seal (5a). The second end (13) is sealingly engageable to an engagement surface (2a) about a port into a process camber (FIG. 2).

Page 3

Application/Control Number: 10/079,027

Art Unit: 3676

7. The flexible member defines a transition space in a first zone P1, which is in fluid communication with the process chamber (defined by the interior of 2a). The port comprises a central axis and the flexible member (6a) allows movement of the shaft (1a) seal in at least two degrees of freedom relative to the central axis of the port (FIG. 2). The port has a port size (13) substantially larger than the shaft size (outer diameter of 1a), which extends through the port (FIG. 2). The shaft may be angularly or laterally off set with respect to a central axis of the seal device (via its flexible bellows. The sealing portion of the shaft seal sealingly engages with a cylindrical-shaped portion of the shaft. The support portion of the shaft (1a) is substantially rigid and constructed of metal or PTFE (Col. 2, line 31). The flexible member may be rubber or an elastomer. The flexible member includes a plurality of undulations forming a bellows portion (FIG. There is a first retaining ring constructed and arranged to selaingly engage a first end of the flexible member to the shaft. An o-ring is positioned between the first retaining ring and the shaft seal. There is a second retaining ring (13) constructed and arranged to selaingly engage a second end of the flexible member to an engagement surface of the process chamber (interior of 2a). There is a second o-ring positioned between the second retaining ring (13) and the engagement surface (2a). The flexible member (6a) includes a flexible collar (portion connecting the bellows and 13). The device is fluidly connectable to a vacuum source (Col. 4, line 41).

Page 4

Application/Control Number: 10/079,027

Art Unit: 3676

Page 5

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Enoch E Peavey whose telephone number is 305 1977. The examiner can normally be reached on Mon-Fri 8:00 am to 4:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (703) 308- 3179. The fax phone numbers for the organization where this application or proceeding is assigned are 305 3597 for regular communications and 305 3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 1113.

Anthony Knight
Supervisory Patent Examiner

**Group 3600** 

Enoch Peavey Art Upit 3676

July 14, 2003